EPISODE 723

[INTRODUCTION]

[00:00:00] JM: Podcasts have surged in popularity, but the podcast ecosystem remains difficult to work with. Podcast listeners have difficulty finding episodes. Podcast creators have difficulty finding out how to get started. The advertising marketplaces for podcasts are immature and it can be difficult to build a business as a podcaster. Podcasting is unlike almost any other media format that we consume on the internet. There's not an algorithmic feed of podcasts. We subscribe to podcasts we like and we see everything that gets published.

Podcasting originated with Apple who has not shown much interest in the podcast medium. Anchor is a platform that makes it easy for users to publish podcasts. Today, a large percentage of the new podcasts created on the internet are started on Anchor. Nir Zicherman is the CTO at Anchor and he joins the show to discuss the strange world of podcast technology and how Anchor is building a business. Anchor has raised a large amount of money from Google Ventures, so the company has large ambitions and it was great to talk to Nir about a bright future for podcasts.

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[INTERVIEW]

[00:03:17] JM: Nir Zicherman, you are the CTO at Anchor. Welcome to Software Engineering Daily.

[00:03:22] NZ: Thanks for having me.

[00:03:23] JM: Podcast consumption is unlike other modern media consumption formats. We have a time ordered feed of things that we consume, podcasts that we're subscribed to as supposed to things like Facebook or YouTube where we have this algorithmic feed. In podcasting, we don't have a great recommendation system. There's not good sharing, but the content on podcasts is amazing. How did we get to this strange place where podcasting is the way that it is?

[00:03:58] NZ: Yeah, it's an interesting question. I think the history of the medium, the thing that always sort of blows my mind around it is that it's not as old as it seems it is, because the technology that powers it seems like a very antiquated thing in modern times, because like you said, it's different from any other medium. The notion of video or photography or written text on the internet being powered by XML files that are basically just passed around, it's crazy to think that there's a medium that is as prominent and ubiquitous as podcasting has become that is still powered by that type of technology. Yet as a medium, it's really only existed for 14 or 15 years.

Originally, this was a way for people to just pass audio files around the internet and some point somebody basically just standardized the RSS format for delivering audio files and how they should be passed around in RSS form. Somewhere around 13 or 14 years ago, I think Apple made the decision to allow you to listen to them in iTunes and that was sort of like the breaking point. But I think the decision by Apple to rely on the technology that powered it at the time, which was RSS, is the reason why we still have that being the format that's used today.

[00:05:06] JM: Indeed, and the legacy of Apple starting this as supposed to an advertising-driven company.

[00:05:13] NZ: Yeah, definitely. I mean, Apple has, as I'm sure you know for over a decade now, they have been the primary distributor of this content. They're the thing that most people associate with podcasting when they talk about where they listen to podcast. They're still the majority of the consumption that happens worldwide. I do think that those patterns, we could talk about those, but that type of pattern of Apple's dominance in the space is probably going to decrease overtime, because I think more and more people are starting to take this seriously. Yeah, for the past almost decade and a half, it's been pretty much universally understood that podcasting is synonymous with originally iTunes and now they call it Apple Podcast.

[00:05:51] JM: I agree with what you said, and I think – As I understand, here is how the distribution works for podcast. When I start a podcast, I create, for example, a WordPress site and I make an RSS feed from that WordPress site and I have audio files associated with each of those WordPress posts. I turn my WordPress site – My WordPress site generates an RSS feed, which is like you said an XML representation of the schema of my site, which also contains the links to the MP3 files. I take that RSS feed and I give it to Apple. Apple then has the index of podcasts and other podcast distributors, or places where people subscribe to podcasts. They are almost all reading from this Apple index, the index of podcasts that Apple keeps. Do I understand that correctly? That's the choke point that Apple has control over.

[00:06:51] NZ: Sort of. I think five years ago, the way that you just described it, was probably 99% true. I think today with the rising of additional podcast playing platforms, and it's worth noting that doesn't necessarily mean a podcast playing app. That could also be a website. That could also be a smart speaker, like the Amazon Echo or the Google Home. There are a lot more

places where the stuff can get distributed. As a result, there are a lot more catalogs for – Yeah, I think you referred to it as an index. There are a lot more catalogs and indices that aggregate this type of content.

Today, I think the reliance of Apple being the aggregator that everybody else relies on to power their own distribution is probably not as true. Google Podcast, Spotify, a lot of these platforms that are becoming – Stitcher. A lot of platforms that are becoming more popular on the consumption side are actually not pulling directly from Apple. There are certainly ones that do. Apple, they have a review process that a lot of other podcast platforms don't have. I think it's just sort of different methodology, like people who want to mirror the Apple catalog will mirror it, but in certain cases there are sometimes podcasts that don't end up on Apple's catalog that do end up in other places. I think for that reason, a lot of people sort of switch to maybe aggregating feeds themselves or crawling the internet or allowing users to submit to them directly. There are definitely differences today that probably didn't exist around 3, 4 years ago just as more and more platforms become more popular.

I think the other thing that you said that's really interesting that a lot of people don't know is that in all of these cases, nobody is actually hosting this content. The content is indexed in a catalog that's basically just effectively a search engine for podcast that exists on the internet. But when somebody, for example, listens to this particular episode and this particular podcast, they're not listening to a file that lives on Apple servers if they're listening in Apple podcast. All Apple podcast is doing is basically just pointing the user to an audio file that lives on your servers or whatever you're using to host. In that sense, I think audio is really unique, because the consumption is totally decoupled from the distribution, and it doesn't matter where you listen. At the end of the day, it's still all pulling from the same audio file and the same RSS feed.

[00:08:49] JM: This is what is so curious, is the dominant form of video consumption is YouTube, which is entirely centralized. You give YouTube your video. They figure out how to host it and push it out to the CDNs and how to build recommendations around those videos and they give you all kinds of playlist infrastructure and whatnot. On the other hand, podcast is total Wild West. There's not centralization around the hosting, or the recommendations, or transcriptions, or any of these stuff. You would think that it's going to go in one direction or the other for both of these things, right? Because eventually hosting video files is going to be as

cheap as hosting audio files, although hosting audio files is still somewhat preponderously expensive in some cases. Are we going to move towards centralization, or decentralization, or both? Who controls podcast distribution? What's going to happen?

[00:09:48] NZ: It's a really interesting question. I think it depends on who you ask, because different people have different views on this. I think the easier side of the equation to talk about is the consumption side, because like you mentioned, podcasting, because it's so decentralized and we like we touched Just like we touched on the fact that the content distribution is actually totally decoupled from consumption. What that means is that there is absolutely nothing stopping the next great podcast playing the experience from emerging having the world's catalog of podcasting included in their platform, because they're basically just aggregating content that lives on the internet and they could disrupt the market. I think you've seen that with Spotify's rise. You've seen that with Google Podcast coming out with their own native player.

The fact that Apple has dominance over the space on the consumption side historically doesn't necessarily indicate that they're going to continue to have dominance primarily because the barrier to entry for a new player isn't high? There is always the ability for somebody new to come into the space and offer the entire feature set of what's offered by every other podcast player.

Apple, I think, in large part, their dominance stems from the fact that they just happened to be first and they were the ones to take this – To their credit, to take this area a lot more seriously than other people did. But does that make sense that you basically have –. Even if your third-party developer who wants to build a great app, there are very great small apps that emerge sort of out of nowhere. You're able to come out the door and basically offer people the exact same experience that they're having in other places. From that perspective I, believe that the fragmentation of the market on the consumption side is kind of an inevitability. I think it's only going to get more and more fragmented. For that reason, we could talk about Anchor and our approach, but I think the approach of coming at this from trying to dominate the consumption side of the market would've been a mistake, because there is very little in podcasting, because it's all powered by the same technology and it's all decentralized and everybody has access to the safe stuff. There is very little that a podcast player can do to differentiate itself in this market. At least that's what I believe.

[00:11:37] JM: I would disagree with that. My perspective is if you really wanted to crush it as a podcast player, here's what you would do. First of all, you'd take every single podcast and you'd make sure you have a transcription over it. You'd build collaborative filtering around transcriptions. You do topic modeling. You'd find ways to use data brokers to get information about other podcasting platforms. You would build good sharing, like Overcast has. I mean, there's a multitude of things that you can do, and most of the podcast players just like stop at a certain point. They don't innovate. But you can do things –For example, the use case that always bugs me is like I listen to so much content on my podcast player and a lot of my podcast listening is every morning I get up and I go for a run and I go to Starbucks and I'm listening to a podcast on my way to Starbucks. Then when I get to Starbucks, I start reading content. Why is there not a way to have the content that I'm listening to inform what I'm reading? Why am I not getting article recommendations based off of what I am listening to? I would say it's because no podcast player has built the infrastructure to combine those two things.

[00:12:51] NZ: Yeah. That's definitely interesting. I think the other part of the problem is that the fact that it's all powered by RSS, which is a very one-directional limited format and that people are very sort of historically sensitive to changing or experimenting with too much. I think as a result of that, any individual podcast playing platform that wants to innovate on the side of personalization and data gathering, it's very hard for them to do, because they only own a very small piece of the pie. The more fragment the market becomes, the harder it is for you to basically offer intent personalization that is very custom tailored across a large network of people. Spotify only has awareness of what people who are listening on Spotify do, and there is very little data sharing across the different podcast players or across the creation platforms, the consumption platforms.

I think until some fundamental change has happened in the way that people think about either the technology that powers this stuff and the fact that that needs to change or allowing for more data knowledge transfer between the different platforms as this market stays fragmented, I don't know that a lot is going to change.

I totally hear your point though about innovation. I think there is a ton of room for innovation on the podcast playing side, and I don't want to make it seem like that's not the case. I definitely

agree with that. I just think, like you mentioned, it hasn't really happened. There's so much innovation that can happen and I think the reason why it hasn't really happened is because a lot of the stuff that you just mentioned is very expensive. Transcription is extremely expensive, and I know that there are companies that do it, like Castbox, I believe, which is becoming more and more prominent of a podcast player and a lot of people use it on Android and on iOS. It's a great product and I believe that they basically transcribe the entirety of their catalog for the purposes of searching.

That type of thing to me, while it's a great feature, I don't understand the economics of how –

[00:14:32] JM: I don't need it.

[00:14:33] NZ: How that works, because they're offering what I think is sort of an incremental benefit to the end user experience who can now search the entire catalog by particular key phrase where they can't do that on another platform, but at a cost that is probably extremely high. At least for accuracy. If you want to be inaccurate, I guess there are ways to do it cheaply. I think that side of it to me is more of a cost question and that the economics of the space currently make it really hard to innovate on the stuff that you mentioned, like transcription.

[00:14:59] JM: Have you looked at the economics of transcription pretty deeply?

[00:15:01] NZ: Yeah, definitely. We offer a feature in Anchor the uses transcription, but it uses it very selectively, partially because of the economics associated with it and partially just because the particular future that we built didn't need everything to be transcribed. Basically, what we do is for people who are using Anchor to create, you can take us splice of your podcast episode and create a video that's auto transcribed. It looks sort of like an Audiogram. I don't know if you've seen the NPR Audiograms for sharing social. The reason we built that was because creators were basically telling us that it's really hard to share highlights and snippets from their shows on social. So this feature, which is –

[00:15:36] JM: Preaching to the choir.

[00:15:38] NZ: Yeah, exactly. You can use this feature. It's totally free, as is everything else that we offer. But basically would select a highlight from your show, clip that part out. We transcribe it for you. You can correct the transcription. Then once that processes is done, and it's only one to three minutes basically that's been transcribed at that point, you can generate – We generate the video for you automatically and the transcription sort of comes in as you're speaking at the moment that you're saying each of the words. It looks really cool. A lot of people really like it, and that's an example of something that uses transcription, but it uses it in a way that I think makes a lot more economic sense for the benefit that we get off that future and what we're able to offer our users, because we're not transcribing everything and we're only doing it on demand.

[00:16:15] JM: Okay. Google Ventures put $10 million into Anchor, and I thought this was like one of the value add things you get if you get Google Ventures, don't you get unlimited cloud resources? Can't you just go to Google Ventures and be like, "Look, you guys need to know, if we could transcribe every podcast out there, we could do some really interesting things. Can you just give us –" What do you need? 700K in cloud credits? How much would it cost to transcribe the entirety of the podcast universe?

[00:16:43] NZ: Ooh! I don't know. I'd have to run some math there. I think I would speculate it's probably somewhere in the range of hundreds of thousands of dollars. I don't think it's an issue of cost for us. Google Ventures, first of all, extremely helpful to date with everything that we've done. A lot of people don't actually realize that there is very little overlap in terms of the offering between Google Ventures and Google. Google Ventures I think prides themselves on sort of being like an independent standalone venture front. In that sense, they've been very helpful with introductions to people at Google. But I think they think of themselves as a separate entity. I don't want to speak for them. But for me, the transcription thing is less an issue of cost currently for us and the reason why we don't want to transcribe everything yet. It's more that we are a very small team, especially on the engineering side, and everything in a startup is basically a matter of prioritization.

Currently, that doesn't seem like the highest yield for the time resources that it would take to build features around that. That's not to say that is not valuable, but as a founder, I think one of the questions that you constantly have to ask yourself with limited resources, and I'm not just referring to money. I'm mostly referring to time. With the limited amount of time, what are the

things that you can build that we yield the highest benefit in that time and move the needle for the company in the case of transcription? I know other people have experimented with that before. I don't think that's sort of the most needle moving thing that we can do as a company to move the space forward today. That might not be the case down the line.

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[00:18:13] JM: How do you know what it's like to use your product? You're the creator of your product, so it's very hard to put yourself in the shoes of the average user. You can talk to your users. You can also mine and analyze data, but really understanding that experience is hard. Trying to put yourself in the shoes of your user is hard.

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[INTERVIEW CONTINUED]

[00:20:35] JM: You're focused on creation is my sense, like the podcast creation. Your goal right now is you look at podcasting – Like podcasting is as easy as blogging. More people should be doing it. Let's give them the tools to do it. Let's give the tools to distribute it. Let's make it zero cost, and let's make that experience totally frictionless.

I want to say here, I am a really big fan of what you're doing, because whenever I look at podcast companies, I have interviewed a number podcast companies on the podcast – I mean, as a podcaster that's also a software engineer, I obviously look at the space on like, "Is there some kind of business to build here?" So every time I look at one of these podcasting businesses that could be built, probably with the exception of Zencastr. Zencastr I think is a great standalone business. We're using it right now. But a lot of them, you start to look at it and you're like, "Okay, if we solve sharing, then we get kind of a foothold into a business." If you solve the sharing business, maybe we get a foothold into like the podcast hosting business. Then maybe that's a foothold into something else, and then something else. But there's a huge graveyard of podcast companies that have tried to kind of do that inductive, "Let's go from 1, to 2, to 3, to 4 kind of case," and it seems not to work. What you actually have to do is to boil the ocean. You have to say, "We're going to do all of podcasting," and I that's my sense of what Anchor is aiming to do.

[00:21:57] NZ: Right. The way that I always describe our approach and the reason why I think we're different than other companies is that other companies attempt to carve out a piece of an existing pie, especially on the creation, the hosting the distribution side. There is a finite number of podcasts that exist of the world. Apple has stated that the size of their catalog is somewhere in the range of 550,000, I think, currently, and this is for a medium that's been around for 14, 15 years. So it's kind of crazy that it's not bigger.

The reason why it's not bigger, we believe, is because of the insane number of points of friction that exist in the space. For you to be able to create host and distribute, think about the number of things, and you know this firsthand, think about the number of things that you need to go through. You need to buy hardware, because you're not sure what to record with. You need to buy software, unless you're using something open source, like Audacity, which is very confusing

to use. You need to know how to edit audio. You need to know how to upload that to some service that you pay for, even though in 2018, the notion of paying to host any content on the internet is totally an outdated perspective and a totally outdated business model in every other medium, except for audio. Even if you end up paying for it, these services just spit out an RSS feed and you need to know what to do with that. You need to go around all these different platforms and submit it individually to each one of them.

Three years ago, when my cofounder and I started this company, we looked at all of that. The 17,000 points of friction that exists between you coming up with that idea and you actually being able to get it heard by your fans, and we basically realize that if you eliminated points of friction, just every one of these points of friction, you're not carving out a piece of a pie. You're growing the pie. Anchor's philosophy is basically we're not interested in carving out a piece of the pie, we're interested in growing this market and being the company that innovates and removes all these points of friction, because I believe that creators should be able to focus on creation and not have to get bogged down with the hundred other decisions or financial implications of making a podcasting that currently weighs them down.

[00:23:48] JM: By the way, the friction is not only on the creation and distribution side. It's also on the ad network side. Why can't anyone build an ad network on podcasts?

[00:24:00] NZ: Yeah. That's a great question. The modernization piece of this, which from a business perspective I think is one of the most fascinating things to tackle, it's yet another point of friction. I'm a big believer in the fact that if you're a person who has some niche podcast that a handful of people out there love and they want to pay you for it, they should be able to do that and you should be able to earn money from that. If there is a very particular niche advertiser that wants to run ads against your show because they believe that your show targets the audience that they want to reach, why shouldn't you be able to do that? Currently, the economics of the way that podcast advertising works, it does not allow for that. Nobody except for the top 100, 200, 300 shows in the iTune charts can currently monetize their podcasts, unless you're able to go to a platform like Patreon and earn – I don't want to say a living, but earn some amount of money off that platform.

Patreon, as great of a platform as it is, there are a lot of points of friction with the too. For you to be able to create a Patreon account for you to be able to get your listeners to donate to you on Patreon, they have to go and signup for a Patreon account and put in their credit card information. There are a lot of different steps to it. To Patreon's credit, I think what they've done in podcasting has been really innovative, especially considering how many points of friction there have been. But I believe that there is more to the future of monetization in this space, and I think that we're going to sort of be at the forefront of developing really exciting ideas that have never existed before in this space.

[00:25:19] JM: Why is podcasting surging right now?

[00:25:22] NZ: I think it's a combination of awareness. I think five years ago, people just didn't know what this thing was, and it's also a combination of accessibility. On the awareness side, you look at pre-Serial season one, which I think came out in summer of 2014, probably fall 2014. Prior to Serial coming out and everybody talking about it at the water cooler at their job, I would be amazed if the average person that you pulled over on the street had ever listened to a podcast or discussed a podcast with somebody else. There are inflection points in the history of any type of medium that has content that will cause it to become more mainstream.

YouTube had this in the early days, the notion of consuming video online. Nobody did it. It took many repeated success stories of YouTubers creating viral videos and having them spread and shared for YouTube to become a household name and for online video to become a household thing.

[00:26:09] JM: Lazy Sunday.

[00:26:11] NZ: Right. All these inflection points sort of existed historically in every other medium, they historically hadn't existed in podcasting until relatively recently. I think that's going to get more and more frequent. More and more people are going to become aware of it just because of the fact that their friends are talking about it and recommend it. To me, that's another reason why lowering the barrier to entry and allowing new people to enter this space is critical, because you're not going to be able to get to the critical mass of having success stories and

breakout hits unless you have enough people creating that the probability of having a breakout hit is high.

As long as the barrier to entry for new creators who have really interesting ideas is really high, the majority of them are just going to drop off. Think about how many amazing ideas in the world of podcasting would have existed if tools like Anchor existed 5 or 10 years ago. Think about how different the ocean of content that exists in the world to consume in audio form. It makes me sad when I think about how many creators were probably discouraged over the years from creating amazing content.

Just to finish my point on the question of why now, I think the other piece of it is accessibility. I think, historically, you could only really consume this stuff if you had originally in iPod that you could plug into your computer that had iTunes on it that allowed you to download stuff and then put it on your iPod and listen to it offline. There were very few people who were able to do that. There were very few people who had the means to do that.

Today, it's primarily still an iPhone consumed thing. IPhones tend to be purchased by people with higher disposable incomes. It's a particular socioeconomic band. That is changing. More and more people are having access to smart speakers and connected cars and devices like Android phones, which tend to be representative in different socioeconomic circles and now have a native podcast playing experience, whereas a few years ago, it just wasn't a thing that existed. You can only really consume it if you were in a narrow band of people who had iPhones.

I think that change is also critical. I think more and more people having the ability to consume podcasts. Even if they're not aware of them, you had the ability to tap up on, go and download content. Whereas a few years ago, you couldn't have that. That's going to totally change the world.

[00:28:09] JM: The Serial example is such an interesting case study for a number of reasons. One, as you said, Serial was a different format than what you and I are engaging in right now. This one-on-one podcast format. Now, the one-on-one podcast conversation is my favorite format by far. I like it even more than Serial. Serial was not exactly for me. My belief is that

people really like the one-on-one form of conversation. If you look at the top of the podcast charts, it's Joe Rogan having three-hour conversations with random people, which I think is super valuable. Maybe that's a thing what we just need today, because it's sort of like the thing that's orthogonal to the snackable, bite-sized, just load of garbage that you're inundated with on every other platform from, from Twitter, to YouTube, to whatever. Not that there isn't excellent content on those other places, but podcasting is sort of a refuge for people who grew up reading books and just who feel so overwhelmed today and is a refuge for long-form content for big ideas and through the medium of conversation that doesn't exist. We're not making phone calls to each other anymore and we're more lonely, we're longing for this sense of two-person conversation. But Serial was not that. Serial was this highly produced thing with flash cuts and kind of like old, not footage, but audio footage snipped together to this massive grand project that had an amazing result.

It's also an interesting example in the advertising side of things, because that was MailChimp, MailCamp, which was a brand advertising play, if I recall. I don't think they had a promo code with that one.

[00:29:57] NZ: Is that right? Is that right?

[00:29:58] JM: I am pretty sure there was no promo code in that campaign, and I believe it was a massive inflection. We should look that up. But in any case, that was a massive – Whether or not there was a promo code, the lasting impact of the whole MailCamp thing, that was like – I believe it was brand advertising. I mean, even if there was a promo code, the impact was brand advertising, because I'm sure there are plenty of people who heard that show and they didn't start a newsletter immediately.

Yet, today, the advertising on podcasts is all promo code conversion-based advertising. Anyway, I don't know a lot there. I mean, I agree with you, that podcasting is an unexplored medium. I think that was the main point you brought up with Serial, and I think – Yeah, I agree. If you give people tools, they will do things that will surprise you.

[00:30:46] NZ: Yeah. The Serial example I think is also interesting, because I think a lot of people have the misconception that Serial was a sign that that format was an important format

for the space and a necessary format for the space. But Serial, since it came out, has not had a successor that has been anywhere nearly as popular as Serial was, including subsequent seasons of that same show.

I think the reason is because Serial's success, a lot of it probably came out of the fact that it was amazing content and it was created in a very compelling way and it was very highly produced. But Serial's success to be wasn't an indicator of the fact that that format, that particular format of a podcast, was the right answer. It's the fact that podcasting allowed people to consume content in a way that they weren't used to before. Serial just happened to be the first really compelling ubiquitous commonplace implementation of that. But I see that more as like a sign of the power of podcasting than a sign of that particular show, if that makes sense.

A great example of this is I live in New Jersey and part of my commute every day is to take the path train from Hoboken into the city to the office. It's roughly a 20-minute ride. Very often, when I'm on the train, it's underground. I don't have a reception. I'm on the train, in a crowded train. Taking out my phone is disruptive.

[00:31:53] JM: The Daily.

[00:31:55] NZ: Yeah. Not the Daily. What I was actually going to say was Joe Rogan, which you mentioned. In what other possible format would I be compelled to listen to a four-hour interview between two guys sitting down and talking into microphone? I would never watch a video of that ever. The reason is because the moments that I have where I'm able to consume video, they're precious moments in my day. Audio allows me to consume content in a moment in time or a span of time where I am unable to consume other types of content like that path ride in and out of the city every single day.

I'm standing it was crowded train. I'm unable to hold the phone up. I have to hold my bag. I have to to hold on to the railing. I have headphones in my ears. I'm listening to Joe Rogan for 40 minutes every single day. That fills up three or four days of commuting when I listen to a four-hour episode. I end up consuming the type of content that not only would I not consume in other formats. I'm missing out if I'm trying to consume it in other formats, because Joe Rogan is a great example of like, I think the fact that he is doing it in audio with the people that he's doing it

with and they were able to just develop conversations over the course of four hours is fascinating.

By the end of a four-hour interview that I listen to with Joe Rogan, they cover content that I never thought they would cover in the beginning of that interview. You're not able to do that in a 10-minute video or in an Instagram post. There's something really unique about that format too. I totally agree with you, that the most compelling form podcasting is the interview format, the type that you and I are having right now.

[00:33:14] JM: Today, at least.

[00:33:14] NZ: Today, at least. Yeah. Who knows what it will be a few years from now? The example that we always use at Anchor is like before YouTube became popular, who would've thought that unboxing videos could be a thing? The notion of like watching somebody open up a box. It's crazy that that became as popular as it did, but those were huge. Those were huge, and they never would've existed unless the exact right format to allow for people to enjoy that type of content came along when it did.

[00:33:39] JM: Well, if you look at the Daily, that is an example where – That's kind of like Serial, because they broke out with the new format basically. The Daily is this Daily podcast from the New York Times and it's like 20, 25 minutes long. But I think the draw of the Daily is it's Michael Barbaro Daily. It's a host that you become familiar with. You're intimate with the host, and the host is telling you things that are going on in the news and he's talking to random people. But if they dropped out Michael Barbaro and swapped him with a different a host, and they did this at some point, he took a vacation. I heard one of those episodes, I was like not interested. I want the host I'm familiar with.

[00:34:15] NZ: Podcasting, probably because it's so intimate, I think people get an attachment with host that might not exist in other mediums, especially in writing. In written journalism, it's hard to get attached to the person whose writing, because I think a lot of it obviously on the internet looks the same. But a person's voice and a person who you get to know over the course of consuming many of their episodes, there's something there that is very unique to audio. I totally agree with you. I think that's why if you look at all the top shows in the iTunes

charts, I'm willing to bet the majority of them are host-driven their success, not content-driven in their success.

[00:34:46] JM: Yes. By the way, you said there's a thing you can capture in a four-hour dialogue between two people that you can't capture in a video or an article, but I believe that there's also something you can get out a four-hour conversation the you cannot get out of a 12-hour audiobook. The fact that you have two people batting around an idea and you get to be a fly on the wall is such a different way of examining and playing around with ideas than like the audiobook – I mean, personally, in school, I was so bored. This format, where you sit in desks and there is the grand orator at the front of the room who supposedly has all the knowledge, as supposed to a conversational interactive format. It just seems like a strictly inferior way to learn. I think that's why podcasts are more popular than audiobooks.

[00:35:40] NZ: I totally agree. Yeah, I think audiobooks on the same way I – It's a format that I constantly think to myself how am I not more into this? Because given what I do for a career, I run a podcasting company and I've spent years thinking about this space. It's amazing to me that I try just to listen to audiobooks and I just can't get into them. I think you're exactly right, it's because you're – When somebody is just talking at you, it's a very different experience and it's hard to get emotionally attached.

[00:36:03] JM: Yeah. Anchor is a platform for making podcasting. What are the most difficult engineering problem you have in Anchor?

[00:36:14] NZ: There are definitely a lot. It's evolved over the course of the years. I mean, when we first started the company – My cofounder and I, a little background of this, we used to work at Adobe. Prior to Adobe, we've met at a company called Aviary, and Aviary was basically a photo editing platform. It was a photo editing app and SDK, and the entire philosophy at Aviary was basically making photo editing dead simple. It was around the time that Instagram was becoming more and more popular. Our mission was just – Like with Anchor today, in podcasting, it's really hard for people to do this thing. Let's just build tools that let them do it more easily and reduce the friction.

My cofounder Mike and I, we met there. We ended up getting acquired by Adobe, and we left Adobe to start working on Anchor in – I think it was mid-2015. At the time I was the only engineer on the team. So it was me and Mike. His background was design and product. So he designed every pixel, and I wrote every line of code, backend and originally was just an iOS app.

For the first year and a half of working on this project, I was the only engineer. At the time, I think the challenges from an engineering perspective were very unique and specific, because I was the one who is doing them. But it's evolved and what we've done has evolved a lot over the years. Today, early on it probably was not a lot of scaling that we had to account for and how we cache things effectively and return data really, really quickly and are able to reliably stay up, especially because in the world podcasting, like I mentioned, everything is consumed off of our servers. It's not like it's syndicated out other platforms and then consumed off their servers. So uptime is very important. I think, today, that's a consideration that we constantly have to think about. That consideration wasn't an issue when we first started the company, and it was just the two of us sitting and then we work.

[SPONSOR MESSAGE]

[00:37:54] JM: Managed cloud services save developers time and effort. Why would you build your own logging platform, or CMS, or authentication service yourself when a managed tool or API can solve the problem for you? But how do you find the right services to integrate? How do you learn to stich them together? How do you manage credentials within your teams or your products?

Manifold makes your life easier by providing a single workflow to organize your services, connect your integrations and share them with your team. You can discover the best services for your projects in the manifold marketplace or bring your own and manage them all in one dashboard. With services covering authentication, messaging, monitoring, CMS and more, Manifold will keep you on the cutting-edge so you can focus on building your project rather than focusing on problems that have already been solved. I'm a fan of Manifold because it pushes the developer to a higher level of abstraction, which I think can be really productive for allowing you to build and leverage your creativity faster.

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Thanks again to Manifold.

[INTERVIEW CONTINUED]

[00:40:11] JM: Now, if I recall, it was – Basically, the premise was this is a sort of Twitter for audio. We're going to try to normalize the idea of you record a podcast, or maybe you sort of have a conversation with somebody over the phone, almost like you're having like a call with them or a VoIP call, and Anchor kind of turns that into something that other people can consume. That was the MVP, right?

[00:40:38] NZ: Yeah. The earlier version of the product was a lot more social in nature. I think a lot of things were really similar about it in that we attempted to solve the creation aspect at a very similar way. It was all about reducing friction to make it easier to create. The format that people were creating was sort of tangential to podcasting at the time, because we thought that if we made it an interactive format that was multidirectional, it would simultaneously solve a lot of the issues that existed on the creation side and the consumption side.

But as I'm sure many of your guests have probably talked about before, when you're working in content, there is a chicken and egg problem and it's very hard to simultaneously create supply and demand. One of things that we realized over the years especially as a small company, it's really important to lean into the things that work and it's really important to quickly realize what

things don't work. The part of our platform that consistently, for years, resonates with people and leads to growth, is the part of the platform that solves utility problems for creators.

What we basically realized over the course of working on this product and building different features is that the demand side has already been solved by all of these different podcast playing platforms. The unique thing about podcasting is that we can plug into the success of this fragmented consumption market by being the distributor of the content even if people aren't consuming on our platform.

YouTube did not have that advantage. YouTube was not able to have creators on their platform, unless people were either consuming on youtube.com or looking at an embed that was a YouTube-powered embed. In podcasting, it's very different, because people can create and distribute through Anchor and their fans don't ever need to hear the word Anchor to be aware of the fact that the platform exists. The chicken and egg problem becomes a lot simpler in podcasting we believe, because we can focus on solving where we believe the biggest market opportunity lies, which is on the creation side and not have to worry about the distribution side. Let all of the other platforms continue to grow and proliferate, which is only great for us, because it means that our creators get heard more and more.

[00:42:27] JM: Okay. You simplified the distribution process. Instead of having to have – Good God, I think it's podcasts connect. Is that the Apple thing where you have to login and you have to have an Apple ID and you have to submit your RSS feed and it's like a whole ordeal? You take the place of that, but you still submit people's podcasts to podcasts connect on the backend. Do you do that?

[00:42:51] NZ: It's an option. , through Anchor, if you're a more high-end professional podcaster who wants to have full control over your distribution and where your RSS feed is submitted and you want to be the person to submit them, that's totally fine. We give you the option to do that. We're very transparent about the fact that our goal is just to get you heard. If you want to be the person to do that, we empower you to do that.

However, for 99% of people out there, they don't want to have to go through the hassle of creating their Apple ID and verifying their Apple ID with Apple and logging into that dashboard

and submitting their dashboard. They're waiting for approval – Or submitting through the dashboard and waiting for approval and the do the exact same thing for Spotify and for Google and for Stitcher and for all the other platforms.

One of the features that we built that a surprisingly few number of companies, if any, actually offer this, is one tap distribution. If you're using Anchor for free, create your podcasts, record what you want to record with yourself, with other people, just tap a button and we will put you everywhere. You don't have to worry about the fact that it's powered by RSS. You never even need to see an RSS feed. You don't need to worry about how to submit it to these different platforms. If you're willing to let us take over distribution for you and solve that pain point for you, we basically put you everywhere and you don't have to worry about any of the technology that powers it.

[00:43:56] JM: So if I'm a podcaster, the Anchor workflow is I can record my podcasts, I could record it through Anchor if I wanted to. I could still use this phone style feature, but I can just also use my normal workflow. I can edit it in Anchor or I can use my normal workflow, edit in GarageBand or Audacity or whatever else. I create the file, I create the finished audio file. I upload it to Anchor, and then I can get it distributed to all of the different platforms I want to, Spotify, iTunes, Stitcher and what not. What are the other things you take care of? I guess, sharing. What else is there?

[00:44:34] NZ: You touched on monetization earlier. We're starting to develop features that allow creators to earn money. We believe that, like I said, one of the biggest pain points that exist in podcasting is the fact that an average creator, the overwhelming number of them will never be able to make money off their podcast, because they just either don't know how or the economics that exists right now podcast advertising don't make sense for sponsoring shows like theirs. It's our belief that there is a massive opportunity in the world of monetization to basically just unlock the ability for different creators to make money in interesting ways.

One example of this that we came out with about a month or two ago is called listener support, and basically what it lets you do is in whatever podcast app your listeners are listening, with a tap of a button inside of that podcasts app, it'll pull up the ability to basically use Apple Pay or Google Pay to subscribe for recurring monthly donation to keep the show running. In other

words, for this particular show, if you wanted to, you would basically just turn this feature on. We would put a link to a support page inside of your show notes and anybody who's listening, even if they're listening in Overcast or in Google Podcast, it doesn't matter. Tap of a button, it will basically bring up a sheet that lets them with a thumbprint and paying through Apple Pay. It will basically let them subscribe to support your show for $0.99 for 99, 99.99 or whatever a month to keep your show running. It's very frictionless from the consumer standpoint. It's basically just two taps. From the creator standpoint, all they have to do if they're using Anchor is basically just turn on the future and we do the rest.

I think there's a lot of really interesting room for innovation with features like that. That basically will make sense for different types of creators that might have different audiences that are in different places and some of these monetization opportunities might make sense for them and some might not, and that's fine. I don't believe the future of this space is basically just like it's advertising or it's nothing, you're big or you're nothing. I believe that everybody should be able to monetize and make money off of either advertisers or their audiences if somebody out there is willing to pay for it, and we want to be the platform that basically enables that.

[00:46:26] JM: You also have a player, right? If I want to listen to podcasts, I can just download the Anchor player on Apple or Android.

[00:46:34] NZ: Yeah. It's built into our app. It's not at all the primary focus for what we're doing. In fact, my goal is not to get people out there to hear about Anchor, the player, and use us instead of the other places that you're listening. I believe that there are a lot of really great podcast players out there. If you want to use Anchor, that's great, but I don't necessarily think that we're the only option or necessarily the right option from everybody. Our focus, like you said, is much more on the creator side and just empowering creators. For us to offer the full suite of tools that we offer, we thought it was important to have the ability to play the content inside of the app or on our website. We do offer that, but that's definitely not the primary experience that we're leaning into.

[00:47:06] JM: You said earlier that the cost of hosting audio files, or you imply that it's de minimis. I didn't know that. So why is my hosting provider and CDN charging me $75 a month to upload a bunch of MP3 files and how much should they be charging me?

[00:47:25] NZ: Yeah. I don't know if you saw this. I wrote a blog post about this that I am happy to share with you. Basically, I think the title of the blog post was something like you should never pay for podcast hosting. 10, 15 years ago, when a handful of hosting companies emerged in the space, the business model that made sense at the time and that all of them basically just grandfathered themselves into was charging creators to host audio on the internet.

With the expansion of services like Amazon Web Services, which we use, our entire backend runs on AWS hosting files on the cloud, on the web for people to consume. It's very, very cheap. In fact, for 99+ percent of podcasts that exists in the world, the cost to us as a company of hosting your content is minimal and the notion of charging you anywhere from $10, $20 to $75 a month to host that content, it's just totally unfair to you. Because, like I said, I believe that friction genuinely keeps this space small and genuinely keeps creators from starting podcasts. One of the biggest points of friction especially prevents a diverse set of creators from existing in this space is a really high cost. That's the biggest barrier to entry that will prevent this thing from becoming a multicultural, multinational phenomenon, because a lot of people can't afford $75 a month for something that they just want to experiment with.

If you're a hobbyist who's not getting paid or not getting sponsors, the idea of spending that much for a hobby to be able to create content in audio form, it'll totally turn you off. Yet you can go to YouTube and video files that's worth mentioning or significantly larger files and audio files, YouTube lets you host for free and so does every other video hosting platform on the Internet.

The idea that audio should be something that the creator pays for, it just boggles my mind that that's still a thing and it also boggles my mind that people are continuously okay with paying that when there are services like ours that let you do it for free. Our business model is not to make money off of the creator. I'm not interested in charging you $75 a month's to host. It cost me maybe a couple of dollars a month to host for you.

[00:49:22] JM: I'll tell you why I pay $75 month. It's completely idiotic, but I still do it. When I was starting this business, I was looking up, "Okay. Where should I host my audio files?" There is a certain provider who I know that you know. I'm sure you know what name I'm thinking of, or if you don't know, it's like a very short list of names that it could be. I read this article that said, "If

you want trustworthy analytics, you need to go with this certain provider. They're going to tell you how many users are listening to your podcast," and that's why I chose that provider. That's why I'm paying a lot of money to it, and I have never had any advertiser ask me, "Who is your hosting provider?" Because the implication early on was, "Oh, you need to go with this trusted hosting provider, because otherwise they're not going to believe your analytics." I've never had anybody ask me who my hosting provider is. They always just trust the number that I give them for their analytics. That's a whole other problem that we could discuss, the analytics issue.

[00:50:23] NZ: On that point, let me – I'll sort of speak to two myths that exist in this space that I think people need to be aware are just not true. Myth number one is on the analytics side. The notion that any one particular platform has more insight than any other platform is just not true.

[00:50:38] JM: Well, except Apple.

[00:50:39] NZ: Except Apple, but Apple is not a hosting product. They are a consumption product. So they have data about how people are consuming only on their platform. They don't have data about how people are consuming on platforms like Spotify. The hosts of the content is only aware of basically two things, which files are being downloaded and what IP address is downloading them and where and in what podcast player are people consuming it? That's all they have. If the host is packaging that in a different way, some of them look nice, some of them –I believe that we put a lot of work into the analytics on our platform to try and present them in a way that's really readable, because I think a lot of the other hosts that exist make them really difficult to digest.

At the end of the day, our analytics and everybody else's analytics is the same. So the idea of paying more money, in some cases, hundreds of dollars more a year to get access to analytics that you could get for free on any hosting product, it's just not true that they're offering you anything different. So in that case, I think that's a myth that prevents people from exploring other options. That, for some reason, just continues to spread.

The other piece of it is the cost. The notion that 10 years ago it might have cost more money to host files on the internet, that cost drops every single year. Not only does the cost of hosting files drop for these hosting providers, but the bigger they get, the more economies of scale they

have and the better deals they're able to sign with whoever it is that they're using to host their content. Essentially, what that means is that every single year, both because technology gets better and things get cheaper and also because these platforms get bigger, every single year the cost per megabyte to host your content goes down for these hosting providers. Yet if you look historically at the prices that they've charged you, they have never reduced their prices. In all of these the businesses that basically charge you for podcast hosting, I think the bare minimum price for uploading something like 50 MB per month or whatever it is 10 years ago was probably about $10, $20 a month. That hasn't changed. That hasn't gone down, despite the fact that their cost has probably plummeted in the same 10 year period.

[00:52:37] JM: It is definitely on my backlog to move my hosting provider from that provider who shall not be named to Anchor. Honestly, I think at this point, I think you guys won me over. I need think about a little bit more. The fact that you got sharing there to is pretty useful.

Let's just close off. You mentioned a couple of myths about podcast hosting. I'm sure you have other myths and unconventional beliefs about podcasting or maybe you have some interesting data on podcasting. What is something weird about podcasting, or just a belief about podcasting that you have that I won't hear anywhere else?

[00:53:13] NZ: Yeah, that's a great question. I think we have a lot of insight into data probably by virtue of the fact that just the volume of podcasts that we have posted on our platform is a lot bigger than pretty much every other host at this point. One of the stats that we often cite, because we learned this recently, is that one in three new podcast that's created in the entire world is hosted on Anchor, which we're really proud of. What that gives us is basically insight into a really large diverse set of content that we do think is a lot more diverse than other hosts have.

One of the interesting things that I can definitely point to is the fact that the mid-tail of content, the content that frankly you probably fall into that's not like the top hundred shows on iTunes that are getting the most money, that mid-tail of content really, really gets consumed. It's not long-tail content. This is content that has a built-in fan base that listens to every episode. It might be in the thousands, tens of thousands. That content really, really does get consumed.

In the aggregate, it makes up the biggest chunk of consumption. These are podcasts that are not being monetized in most cases, or mostly because they're just unaware of how to monetize. The other interesting thing that we're learning more and more is that the backlog of constant gets consumed. I don't know if you have insight into this, but I'd be curious to see if in your experience, episodes that you've published weeks ago, or months ago continue to get consumed. I'm willing to bet that they probably do, because I think every new listener that comes across your podcast realizes that they're a fan, because they listen to the latest episode. They probably go through the backlog and find episodes that they're interested in and download them and listen to them. I think there's a lot of really interesting opportunity with the backlog of content that exists in podcasting that people haven't really done anything interesting with.

[00:54:42] JM: Yes, absolutely. Backlog content, it gets consumed a lot. Man! Interesting stuff. You're going towards monetization. When is the ad network going to happen? Do you think you're going to be able to build ad network, or do you have any plans to?

[00:54:55] NZ: To me, advertising is one of those things that, like I mentioned, I think every creator has a different category of modernization that would make sense for them if they were offered the opportunity to be as one of many. I think the ability to get money from an advertiser versus the ability to get money directly from your audience, or maybe content that sits behind an exclusivity pay wall, or maybe just donations from your fans, like with listener support, all of these different things will make sense to different types of creators. Not to give too much away, but within relatively soon period, we're going to be rolling out additional features that basically let people monetize in ways that have literally never existed in this space.

I'm really, really interested to see what that does to continue to lower the barrier to entry, continue to grow the pie and incentivize people who previously were discouraged from entering the space because of how hard it was and how expensive it was. Now there's even more opportunity for them to get started, because even if you only have a few fans out there, you should be able to make money off of this and you can make money off of this you should know that your content is actually worth something even if historically it hasn't seemed that way in this place.

[00:55:54] JM: Nir, thank you for coming on the show. It's been really great talking to you.

[00:55:56] NZ: Yeah, thank you. It sounds like we could've covered a lot more if we had more time.

[00:56:00] JM: Absolutely. Well, I'm sure we should get coffee sometime or meet up if you're in San Francisco or I'm in New York. It'd be great to chat more. I have thought a lot about this space. So I would love to chat more.

[00:56:11] NZ: Yeah, definitely. Thanks for having me.

[END OF INTERVIEW]

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